

ddCAGTC^T_T
GCTGCTGGTCCGTCAG^T_T

DM429 GCTGCTGGTCCGTCAGTTTCTGACdd
dG = -2.85 dH = -43.5 dS = -131.2 Tm = 58.3

ddCGCAGTC^T_T
GCTGCTGGTCCGCTCACG^T_T

MM166 GCTGCTGGTCCGCTCACGTTTTCGTGACGdd
dG = -9.02 dH = -75.1 dS = -213.1 Tm = 79.2

ddCAATAATA^T_T
GCTGCTGGTCCGTTATTAT^T_T

DM432 GCTGCTGGTCCGTTATTATTTTATAATAACdd
dG = -2.57 dH = -59.8 dS = -184.4 Tm = 51.1

ddCAATAATG^T_T
GCTGCTGGTCCGTTATTAC^T_T

DM433 GCTGCTGGTCCGTTATTACTTTTGTAAATAACdd
dG = -3.73 dH = -64.0 dS = -194.4 Tm = 56.0

ddCAGTAC^T_T
GCTGCTGGTCCGTCATG^T_T

DM430 GCTGCTGGTCCGTCATGTTTTCATGACdd
dG = -3.71 dH = -51.4 dS = -153.8 Tm = 61.1

ddCAGTAT^T_T
GCTGCTGGTCCGTCATA^T_T

DM431 GCTGCTGGTCCGTCATATTTATGACdd
dG = -2.34 dH = -46.4 dS = -142.2 Tm = 53.2

ddCAATAATA^T_T
GCTGCTGGTCCGTTATTATAT^T_T

DM434 GCTGCTGGTCCGTTATTATTTTATAATAACdd
dG = -3.65 dH = -74.2 dS = -227.3 Tm = 53.3

ddCAATAATATG^T_T
GCTGCTGGTCCGTTATTATAC^T_T

DM435 GCTGCTGGTCCGTTATTACTTTGTATAATAACdd
dG = -4.81 dH = -78.4 dS = -237.3 Tm = 57.2

GCTGAGCTGC^T_T
5' FAM-TXAGAGTCTGGTGCCGACTCGACGTTTTCGTGAGTCG

DM436 FAM-TXAGAGTCTGGTGCCGACTCGACGTTTTCGTGAGTCG

FIG. 1B

MM001 CACGACAGGACAGACAGGAXYGCCTCACGTTTTCGTGAGCT
MM119 CACACAGGACAXXAGCTCACGTTTTCGTGAGCT

$\Delta G^\circ = -9.0$ kcal/mole at 37 °C
 $\Delta H^\circ = -75.1$ kcal/mole
 $\Delta S^\circ = -213.1$ cal/ (°K.mol)
 $T_m = 79.2^\circ\text{C}$ assuming a 2 state mo

DM362 GCTGTCTGGTXXGCTCACGTTTTCGTGAGC
DM363 GCTGTCTGGTXXCGCTCACGTTTTCGTGAGC
DM364 GCTGTCTGGTCCCGCTCACGTTTTCGTGAGCT
DM365 GCTGTCTGGTXXCGACTCGACGTTTTCGTGAGCTCG
DM366 GCTGTCTGGTCCGGACTCGACGTTTTCGTGAGC [u-ome] [c-ome] [ddc]
ddcGAGTGC T
GCTGTCTGGTCCGCGCTCACGTTTTCGTGAGC-ddc

T
CGAGTGC T
5' CACGACAGGACAGACAGGAXYGCCTCACG T
5' CACGACAGGACAGACAGGAXYGCCTCACGTTTTCGTGAGCT MM001
G $^\circ$ = -7.52 kcal/mole at 37 °C
H $^\circ$ = -69.0 kcal/mole
S $^\circ$ = -198.3 cal/ (°K.mol)
T m = 74.8°C assuming a 2 state model

8
TCGAGTGC T
5' CACACAGGACGACAXXAGCTCACG T
5' CACACAGGACGACAXXAGCTCACGTTTTCGTGAGCT MM119
G $^\circ$ = -8.00 kcal/mole at 37 °C
H $^\circ$ = -65.5 kcal/mole
S $^\circ$ = -185.2 cal/ (°K.mol)
T m = 80.2°C assuming a 2 state model

7
CGAGTGC T
5' GCTGTCTGGTXXGCTCACG T
5' GCTGTCTGGTXXGCTCACGTTTTCGTGAGC DM362
G $^\circ$ = -6.9 kcal/mole at 37 °C
H $^\circ$ = -63.9 kcal/mole
S $^\circ$ = -183.8 cal/ (°K.mol)
T m = 74.5°C assuming a 2 state model

8
GCGAGTGC T
5' GCTGTCTGGTXXCGCTCACG T
5' GCTGTCTGGTXXCGCTCACGTTTTCGTGAGC DM363
G $^\circ$ = -9.0 kcal/mole at 37 °C
H $^\circ$ = -74.9 kcal/mole
S $^\circ$ = -212.5 cal/ (°K.mol)
T m = 79.4°C assuming a 2 state model

T
GCGAGTGC T
5' GCTGTCTGGTCCCGCTCACG T
5' GCTGTCTGGTCCCGCTCACGTTTTCGTGAGC DM364
G $^\circ$ = -9.3 kcal/mole at 37 °C
H $^\circ$ = -79.3 kcal/mole
S $^\circ$ = -225.7 cal/ (°K.mol)
T m = 78.2°C assuming a 2 state model

10
GCTGAGCTGC T
5' GCTGTCTGGTXXCGACTCGACG T
5' GCTGTCTGGTXXCGACTCGACGTTTTCGTGAGTCCG DM365
G $^\circ$ = -11.2 kcal/mole at 37 °C
H $^\circ$ = -92.0 kcal/mole
S $^\circ$ = -260.5 cal/ (°K.mol)
T m = 80°C assuming a 2 state model

10
CCUGAGCTGC T
5' GCTGTCTGGTCCGGACTCGACG T
5' GCTGTCTGGTCCGGACTCGACGTTTTCGTGAG [u-ome] [c-ome] [ddc] DM366
G $^\circ$ = -10.7 kcal/mole at 37 °C
H $^\circ$ = -89.0 kcal/mole
S $^\circ$ = -252.5 cal/ (°K.mol)
T m = 79.4°C assuming a 2 state model.

FIG. 2

FIG. 2. are duplex decoys

5' GCTGTCTGGTCCGTTATTATAC-PO4	MM308 (o-methyl)
5' GCTGTCTGGTCCGTTATTATAC-PO4	MM309
5' GCTGTCTGGTCCGTTATTATACdd	MM317
5' GCTGTCTGGTCCGTTATTATAC-Biotin	CL085
3' ddCCAGGCAATAATATG	MM312 Tm=45°
3' ddCAGGCAATAATATG	MM311 Tm=40.5°
3' ddCAATAATATG	MM310 Tm=24.3°
3' ddCAGGCAATAATATGGTCTGTCTG	SCJ091
3' ddCCAGGCAATAATATGGTCTGTCTG	MM338
5'-GCTGTYTGGTGXGTTAYTATAC-Biotin	CL077
5'-GCTGTYTGGTGXGTTAYTATAC-PO4	CL062
ddCYCAATXATATG-5'	CL063
ddCACYCAATXATATG-5'	CL064/CL078 Tm=50.4
ddCCACYCAATXATATG-5'	CL065/CL079 Tm=55
5'-GCTGTYTGGTAXGTTAYTATAC-PO4	CL091/CL100
ddCATYCAATXATATG-5'	CL092/CL101

FIG. 3

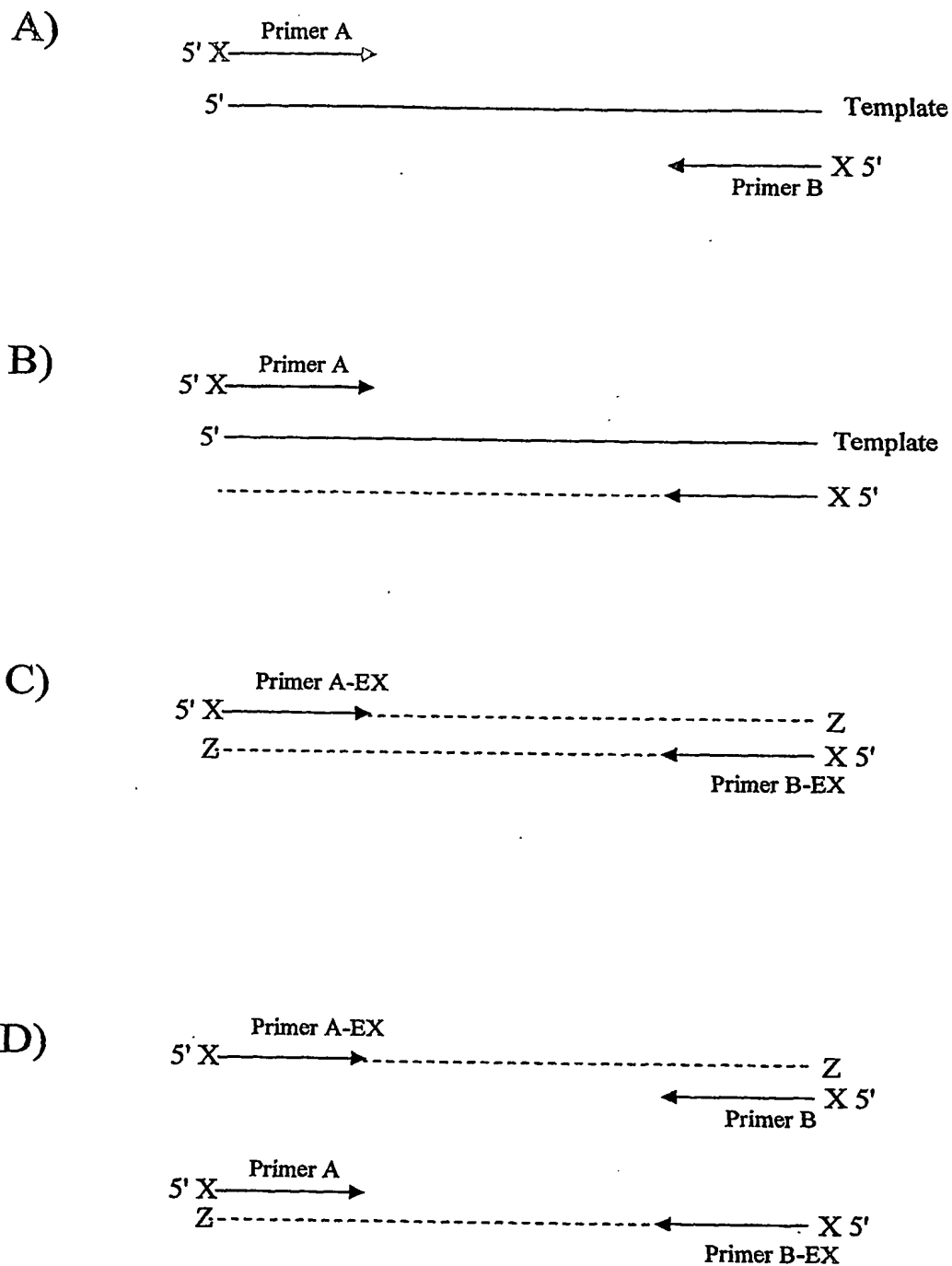


FIG. 4

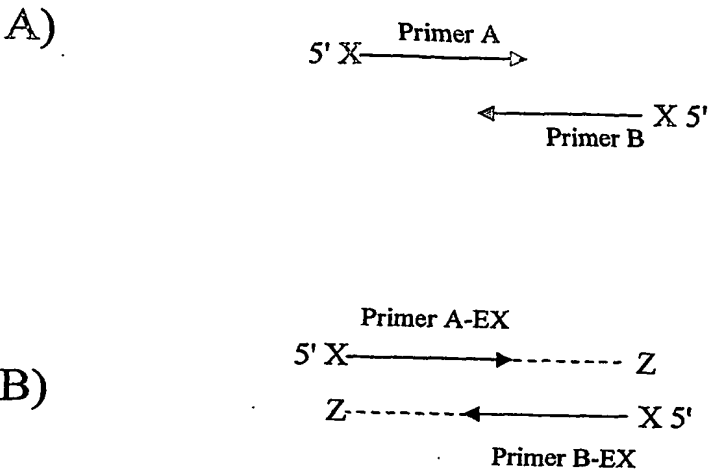
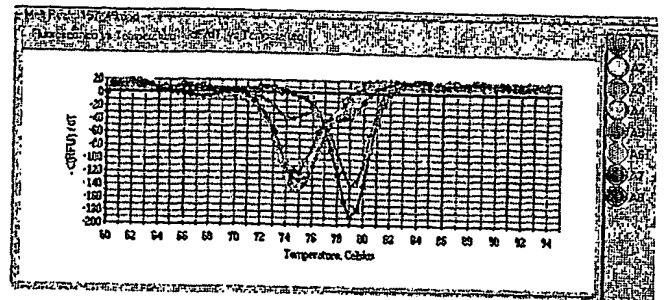
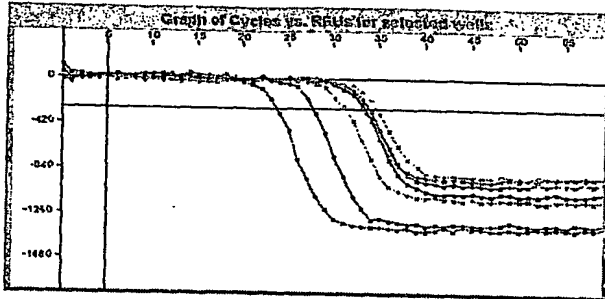
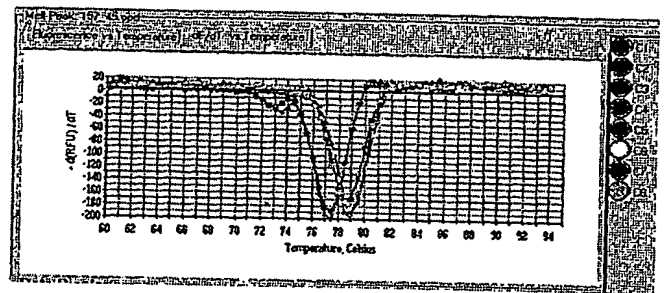
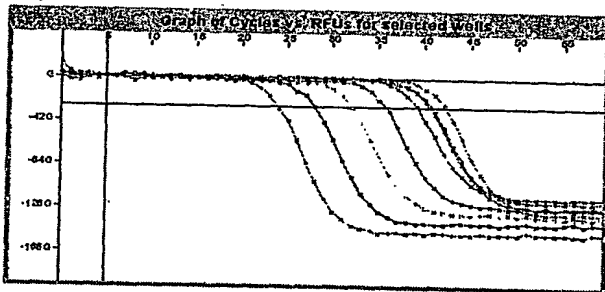


FIG. 5

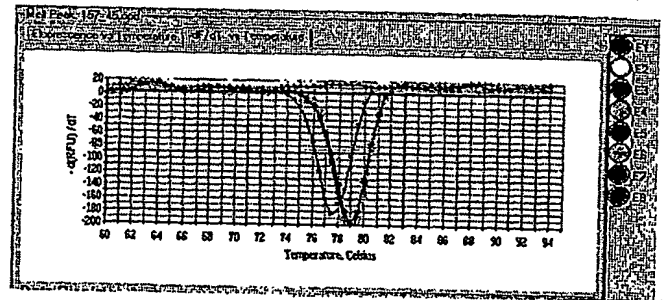
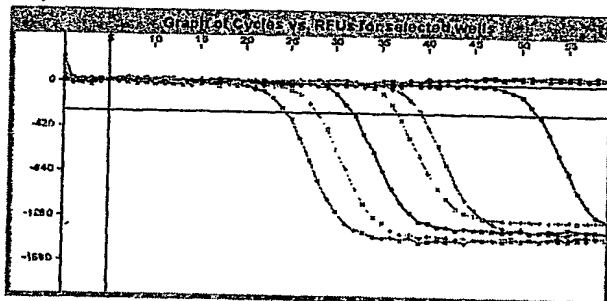
5 A)



5 B)



5 C)



5 D)

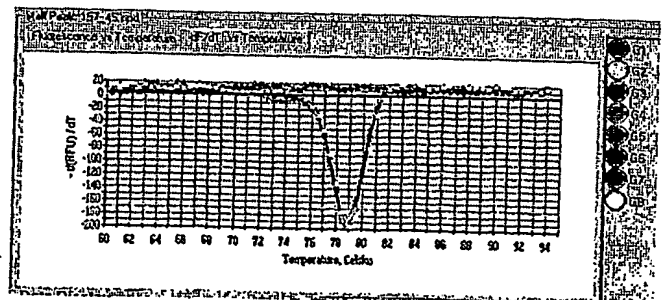
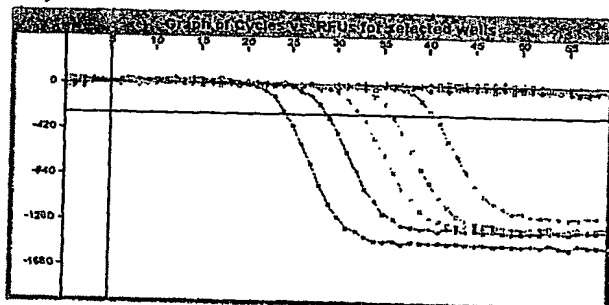


FIG. 6

